Application Number 09/907,230
Responsive to Office Action mailed April 7, 2005

REMARKS

This paper is responsive to the Office Action dated April 7, 2005. Applicants have not amended any of the claims. Claims 1-37 remain pending.

In the Office Action, the Examiner rejected claims 1-6, 8-10, 12, 14-25, 27-32, and 34-47 under 35 U.S.C. 102(b) as being anticipated by Sollish (WO 98/08180). In addition, the Examiner rejected claims 7 and 11 under 35 U.S.C. 103(a) as being unpatentable over Sollish in view of Stebbings (US 6,684,199); rejected claims 13 and 33 under 35 U.S.C. 103(a) as being unpatentable over Sollish in view of Bell (US 6,832,319); and rejected claim 26 under 35 U.S.C. 103(a) as being unpatentable over Sollish in view of Menezes (Menezes, Alfred. Handbook of Applied Cryptography. CRC Press. 1997. page 363).

Applicants respectfully traverse the rejections. The applied references fail to disclose or suggest the inventions defined by Applicants' claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

For example, Applicants' claims require the use of an access key that includes uncorrected data and associated **error correction information having one or more errors**. This feature is lacking from all of the applied references either alone or in combination. In particular, Sollish lacks any suggestion of the use of erroneous error correction information. Similarly, Stebbing and Bell also lack any suggestion of the use of erroneous error correction information. Moreover, while Menezes discusses a specific type of error correction information, i.e., cyclic redundancy codes (CRCs), nothing in Menezes suggests any use of erroneous CRCs. In short, none of the applied references discloses or suggests an access key that includes uncorrected data and associated error correction information having one or more errors, as required in all pending claims.

Claim 1 recites a method comprising receiving input from a user; receiving an access key from a medium, wherein the access key includes uncorrected data and associated **error correction information having one or more errors**; and controlling access to the medium based on the input and the uncorrected data (emphasis added).

Similarly, claim 15 recites a computer-readable medium comprising instructions for causing a programmable processor to receive input from a user; read an access key from a medium, wherein the access key includes uncorrected data and associated **error correction**

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information having one or more errors; and control access to the medium based on the input and the uncorrected data (emphasis added).

Claim 23 recites a computer-readable medium comprising an access key having uncorrected data and **associated error correction information having one or more errors**; digital content; and an executable software application to control access to digital content based on the uncorrected data (emphasis added).

Claim 29 recites a method comprising generating an access key having uncorrected data and **incorrect error correction information**; and associating digital content and the access key on a computer-readable medium (emphasis added).

As outlined in Applicants' specification, an access key having uncorrected data and associated error correction information having one or more errors (i.e., incorrect error correction information) can be useful to protect digital content from unauthorized copying. For example, when the content of the medium having the access key is copied, the error correction information can be applied to the uncorrected data to produce a second access key for the copied medium. However, because the associated error correction information itself includes one or more errors, the second access key for the copied medium will be incorrect and ineffective. Therefore, a user attempting to access the content on the second medium can be thwarted in such attempts.

Claim 5 is dependent upon claim 1 and recites the additional steps of copying content from the medium to a second medium; applying the error correction information (i.e., the error correction information that includes the one or more errors) to the uncorrected data to produce a second access key; and copying the second access key to the second medium. In this case, the second key will be useless, because the error correction information associated with the first key and applied to generate the second key is itself erroneous.

Nothing in any of the applied references is even remotely suggestive of an access key that itself includes uncorrected data and associated error correction information having one or more errors, as recited in all pending claims. This feature is simply lacking from each of the applied prior art references, either singularly or in combination.

In the Office Action, the Examiner stated that Sollish discloses an access key having uncorrected data and associated error correction information having one or more errors. The Examiner cited page 24, line 23 to page 25, line 2 of Sollish for this teaching. However, the

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Examiner misinterpreted this passage of Sollish, as nothing in this passage suggests the use of erroneous error correction information.

Instead, the passage of Sollish cited by the Examiner describes a technique for overriding error correction. In Sollish, the error correction is conventional and does not make use of erroneous (i.e., incorrect) error correction information. Sollish indicates that the application of conventional error correction to "Ambiguous Symbols" can make the symbols non-ambiguous, which is undesirable to Sollish. For this reason, the passage of Sollish from page 24, line 23 to page 25, line 2 describes a technique for overriding error correction with respect to ambiguous symbols. Again, nothing in Sollish indicates that the error correction information includes errors, as required by Applicants' claims.

The techniques of Sollish are very different from those recited in Applicants' claims. In particular, Sollish implements techniques in which "Ambiguous Symbols" are used. The Ambiguous Symbols are not themselves error correction information. Instead, Ambiguous Symbols refer to symbols for which two or more possible values exist. Page 23, lines 7-10. According to Sollish, when an ordinary copy is made of optical media containing one or more Ambiguous Symbols, the copy will not contain such Ambiguous Symbols because standard optical equipment cannot write such Ambiguous Symbols. A media player designed to require Ambiguous Symbols, then, can associate the absence of such symbols with an unauthorized copy.

Again, nothing in the Sollish system suggests the use of error correction information that includes one or more errors, as recited in Applicants' claims. In fact, Sollish specifically discusses error correction, but lacks any suggestion of error detection information that is erroneous. Specifically, Sollish describes error correction because conventional error correction needs to be avoided with respect to Ambiguous Symbols in the Sollish system in order to ensure that Ambiguous Symbols of Sollish are not altered. See page 24, lines 13-25 of Sollish. In other words, conventional error detection, which does not include one or more errors, can undermine the Sollish techniques and, therefore, Sollish describes techniques for disabling such error detection with respect to Ambiguous Symbols. In any case, the passages of Sollish cited by the Examiner, as suggesting error correction information that includes one or more errors, simply do not teach such a feature.

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Moreover, nothing in any of the other applied references provide any teaching that would have led a person of ordinary skill in the art to modify Sollish to implement erroneous error correction information. Indeed, the use of erroneous error correction information appears to be directly conflicting with the teaching of Sollish, insofar as Sollish teaches problems with respect to conventional error correction and the override of conventional (non-erroneous) error correction.

Stebbings, like Sollish, lacks any suggestion of an access key that includes erroneous error detection information. The Bell reference also lacks any suggestion of the use of an access key that includes erroneous error detection information. Furthermore, the Menezes reference, like Sollish, Stebbings and Bell, also lacks any suggestion of an access key includes uncorrected data and associated error correction information having one or more errors.

Applicants' dependent claim 26 further clarifies that the error correction information that includes one or more errors comprises an incorrect cyclical redundancy code (incorrect CRC). In rejecting claim 26, the Examiner further cited Menezes. However, nothing in Menezes suggests any use of an incorrect CRC. Applicants are generally confused as to why the Examiner has cited Menezes, since Applicants are not claiming the use of a correct (non-erroneous) CRC, but rather an incorrect CRC.

Again, Applicants use incorrect error correction information (such as an incorrect CRC) so that when the content of the medium having the access key is copied, the incorrect error correction information can be applied to the uncorrected data to produce a second access key for the copied medium. In this case, because the associated error correction information itself includes one or more errors, the second access key for the copied medium will be incorrect. Therefore, a user attempting to access the content on the second medium can be thwarted in such attempts.

Nothing in any of the applied references discloses or suggests the use of an access key that includes error correction information having one or more errors. This feature is lacking from all of the applied references. For example, as outlined above, Sollish lacks any suggestion of an access key that includes erroneous error correction information. Similarly, Stebbing and Bell also lack any suggestion of an access key that includes erroneous error correction information. While Menezes discusses a specific type of error correction information, i.e., a cyclic redundancy

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code (CRC), nothing in Menezes suggests any use of an incorrect or erroneous CRC. Therefore, Menezes also lacks any suggestion of an access key that includes error correction information having one or more errors.

In view of these fundamental differences between Applicants' pending claims and all of the applied references, Applicants believe that the current rejections are clearly improper. Withdrawal of all pending rejections and allowance of all pending claims is courteously solicited.

Applicants reserve further comment at this time with respect to the dependent claims. However, Applicants do not acquiesce to any of the rejections and reserve the right to present additional arguments with respect to any of the independent or dependent claims.

Please charge any additional fees or credit any overpayment to deposit account number 09-0069. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

7/7/5

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